## **AMENDMENTS TO THE SPECIFICATION**

Please replace the TITLE of the application with the following amended TITLE: "Software Patch Generator <u>Using Compression Techniques</u>".

Please replace the ABSTRACT with the following amended ABSTRACT:

A method and system for generating a patch file from an old version of data which consists of a series of elements and a new version of data which also consists of a series of elements. The old version of data is sorted with a data processor alphabetically according to an established alphabet to create a first sorted list of data. A pointer is maintained in order to indicate each element's original location in the old version. Similarly, the new version of data is sorted alphabetically to create a second sorted list of data with a pointer of each element to indicate the element's original location in the new version. Once the two sorted lists are created, they are recursively compared one word (a group of elements) at a time to search for a match of data. Upon finding a match of data, the first and second sorted lists are searched to find the largest sequence of coinciding elements preceding and succeeding the match of data. Each sequence of coinciding words is then stored in a coincidences list. The coincidences list is processed to remove duplicative information and a patch file is created. Several patch files may then be aggregated into a secure, portable compressed archive to decrease the storage and transfer requirements of the patch file. The compressed archive uses an encryption process and may include an authentication process using digital signatures to secure the contents of

the patch file from unauthorized access and to validate the identity of the creator of the archive. The archive is preferably in the format of a self-extracting .ZIP file, which file may include a rules-based form of intelligence to detect the presence of the appropriate files to be patched and to determine how the patching process should proceed.

Please replace the paragraph beginning at Page 3, Line 19 with the following amended paragraph:

PKZIP® is a utility program that performs data compression and archiving. The file that PKZIP® creates is called a ".ZIP" file. PKZIP® can be used to exchange data files between different platforms or machines. PKSFX® is another data compression program from PKWare, Inc. The function of PKSFX® is to turn a .ZIP file into a self-extracting file with a .EXE file extension. A PKSFX® file is an executable file that automatically extracts the files it contains when executed.

Please replace the paragraph beginning at Page 17, Line 12 with the following amended paragraph:

As shown in FIGS. 13 and 14, the present invention provides an improved method and system for creating a patch file. The resulting patch file 92 may be compressed using a compression program 94 into a .ZIP patch file 96 using PKZIP® or a self-extracting .ZIP patch file 98 using PKSFX® to yield a deliverable of a portable compressed patch file that allows for combining multiple patch files into a portable archive used to transfer

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the collection of patches more efficiently using compression, authentication and encryption. The one or more patch files created will be aggregated into a secure, portable, compressed archive for distribution to files to be patched 100. This portable archive of files 96, 98 also includes features to detect the presence of files to be patched on the target system and then applies the sequence of patches automatically using rules based intelligence 102. This archive may be in the format of a ZIP file or a self-extracting ZIP file, depending upon the compression algorithm used. The archive will hold the patch files in a compressed form to decrease the storage and transfer requirements of the patch data. The ZIP and self-extracting ZIP patch files archive may also include functionality for encryption and authentication 104 of the files and/or archive using digital signatures to secure the contents from unauthorized access and to validate the identity of the creator of the archive.